PHP80

CLINICAL EFFECTIVENESS OF PORTABLE ULTRASOUND IN SMALL EMERGENCY DEPARTMENTS: A SYSTEMATIC REVIEW

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OBJECTIVES: In the 2001 policy statement from the American College of Emergency Physicians, they considered a large number of conditions as primary indications for emergency ultrasonography (US). Early trials of US did not take place in emergency departments (EDs) and the US interpreter was not an emergency physician (EP). The objective of this review was to determine if there is evidence to evaluate whether US conducted by non-radiologists in a small emergency department is an effective diagnostic tool. **METHODS:** A systematic review was conducted to identify health technology assessments (HTAs), systematic reviews (SRs), meta-analyses (MAs), randomized controlled trials (RCTs), and controlled clinical trials published in the last 5 years. **RESULTS:** The search identified nine trials, and two systematic reviews. The primary indications in these reports were: trauma, deep vein thrombosis (DVT), pain, undifferentiated hypotension and US-guided procedures. Reports regarding US-guided procedures took place in small EDs and the success rates of US-guided cannulation were significantly larger compared to the traditional technique. Sensitivity and specificity estimates for EP performed US in the diagnosis of trauma, and DVT are high, and similar to those reported when radiologists interpreted the US scans. The addition of US in diagnosing pelvic pain increases physician confidence and was especially valuable in the evaluation of a patient who is also obese. The addition of an US protocol to standard care afforded physicians the ability to compile a significantly shorter and more accurate list of possible causes of non-traumatic undifferentiated hypotension. These results are inferred from trials from large urban hospitals. **CONCLUSIONS:** Diagnostic estimates obtained when EPs perform the US are comparable to those obtained when the US was performed by a radiologist. US is an effective tool in the hands of EPs in EDs, both small and large.

HEALTH CARE USE & POLICY STUDIES – Population Health

PHP81

USE OF SELF-REPORTED HEALTH STATUS TO PREDICT EMPLOYEE MEDICAL EXPENDITURES

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OBJECTIVES: To quantify the relationship between employees' self-reported health status obtained from annual health risk assessments (HRAs) and subsequent year medical expenditures. **METHODS:** Data were obtained from the MarketScan Research Databases, which includes health care information pooled from large US employers. Employees were identified who completed HRAs in 2006 and had full-year data on medical expenditures in 2007. Four general health status measures, each with 5-point Likert scales, were considered: overall health the past 6 months (1 = excellent, 5 = poor); health impact on work and daily activities (1 = rarely sick, 5 = significant interference); general mood (1 = very happy, 5 = unhappy and have considered getting help); stress (1 = seldom stressed and coping well, 5 = often stressed and trouble coping). Medical expenditures for each individual included total 2007 payments to health care providers for inpatient, outpatient, and pharmacy services covered by the employer health plan. General linear models were used to estimate the association between health status and future expenditure. **RESULTS:** A total of 72,940 employees responded to at least one health status question in 2006 and had full-year claims data for 2007. Mean age was 42 years and 56% were male. The four health status measures were highly intercorrelated (Range of Pearson r: 0.15–0.52). Each measure was strongly associated with future medical expenditures ($p < 0.0001$). The rate of increase in expenditures per one point increment was 30.2% for overall health, 49.5% for health impact, 16.4% for mood, and 12.5% for stress. Inpatient and pharmacy expenditures were generally more responsive to worsening health status than outpatient. **CONCLUSIONS:** Self-reported health status of employees is strongly associated with future medical expenditure. Data from employer-sponsored HRAs may therefore provide a useful indicator of population health and of the benefits of wellness interventions.

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ASSESSMENT OF LIFESPAN AND HEALTH STATUS EXPECTATIONS IN HUNGARY; RESULTS OF A WEB-SURVEY

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OBJECTIVES: Peoples' expectations about length of life and future health related quality of life (HRQoL) may influence their health lifestyle and their compliance and willingness to pay for preventive and curative treatments. The aim of our study was to assess these expectations in a Hungarian sample. **METHODS:** Data were collected through a web-based questionnaire conducted on 26th November, 2008 in collaboration with the Hungarian web-journal Index (http://index.hu). Respondents answered questions about personal characteristics, their current health status (using the EQ-VAS), kin age, and their expectations about length of life and their HRQoL at ages 60, 70, 80 and 90 years (using the EQ-5D profile). **RESULTS:** A total of 9,407 questionnaires were collected and analyzed: mean age 36 (SD 11) years, 32.9% female, mean health status 77 (SD 19), and 64.3% married. The majority was full-time employed (81.5%), 73.6% had a degree, and all income levels were well-represented. Average age of death of kin was between 75–85 years at the majority (51.5%) of the respondents. Self-estimation regarding length of life was mean 79.3 (SD 1.6) years for men and 80.3 (SD 10.1) for women, which is an overestimation of 8.2 and 1.6 years on the actual Hungarian statistical life-expectancy. The difference was greater for younger people (aged ≤50 years: +6.3; aged >50 years: +3.9 years). Respondents expected a decrease in HRQoL with age (0.77 at 60; 0.6 at 70; 0.34 at 80). For instance, mobility problems were expected by 34.1% of respondents at age 60 and by 92.5% at age 90, and mild or severe pain by **51.1% at age 60 and by 88.6% at age** 90. **CONCLUSIONS:** People in Hungary are optimistic about their life expectancy, especially males and younger age-groups. A decrease of HRQoL with age is expected but its gradient and severity differs by health dimensions.

HEALTH CARE USE & POLICY STUDIES – Regulation of Health Care Sector

PHP83

EVALUATING PHARMACEUTICAL MARKETING TOOLS IMPLEMENTED BY THE COMPANIES, OBSERVED AND EXPERIENCED BY PHYSICIANS IN PAKISTAN

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OBJECTIVES: To identify and document various marketing tools commonly used by the pharmaceutical companies in Pakistan. **METHODS:** Cross sectional study design was adopted, using structured questionnaires to interview the respondents. A representative sample (250 each) of physicians and medical representatives was taken in 4 major cities of Punjab and Balochistan, by adopting convenient sampling technique. All the data were analyzed by using SPSS version15. **RESULTS:** According to the main findings, printed materials (99.6% n = 246), drug samples (98.4% n = 243)and giveaways (87% n = 215)are commonly practiced promotional tools. Companies also adopt some special tools including workshops (54.3% n = 134; p = <0.001), banners and stalls in conferences (31.6% n = 78) free medical camps (87.9% n = 217), international excursions (40.9% n = 101; p = <0.001) and national excursions (53.8% n = 133). Representatives also practice tools, not directed/sponsored by their companies like network building (48.6% n = 120; p = 0.001), pre OPD visits (38.1% n = 94; p = 0.004), oblige attendants (48.6% n = 120; p = <0.001), offer free meals (25.9% n = 64; p = <0.001). Few companies don't allow them to do such practices (6.5% n = 16; p = <0.001). Majority of the doctors received drug samples 95.2% (n = 238; p = 0.35). Besides samples, doctors have been offered or received gifts/incentives from minor diagnostic tools (tongue depressor; 53.2% n = 133) to very expensive exclusive personal gifts (55.2% n = 138; p = 0.065). More then half of the doctors (53.2%, n = 133) are using industry gifted diagnostic tools, i.e. stethoscope (48.8% n = 122), thermometer (31.2% n = 78), weighing scale (23.2% n = 58), sphygmomanometer 37.2% (n = 93) and disposable tongue depressor (53.2% n = 133). Physicians also received prescription based incentive offers (74.0%; n = 185) out of which (24.8% n = 62) offers were accepted and (15.2% n = 38) did not responded about the acceptance. The mainly offered prescription based incentives were per-pack percentage (24.0% n = 60; p < 0.001), direct cash (22.4% n = 56; p = 0.017), personalized gifts (26.8% n = 67; p = 0.066), home appliances (5.6% n = 14) and funds for clinics/offices (8.0% n = 20; p = 0.021) **CONCLUSIONS:** Results reflect that printed promotional material, drug samples, giveaways, workshops, prescription based incentives and free medical camps are the promotional tools, most commonly used by the pharmaceutical companies in Pakistan.

PHP84

REGIONAL DIFFERENCES IN ACUTE CARE HOSPITAL BED CAPACITIES FOLLOWING THE 2006–2008 HEALTH CARE REFORM IN HUNGARY

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OBJECTIVES: The new act on developing of the Hungarian health care system—came into effect on the 1st of April 2007 cut the number of hospital beds significantly in Hungary. The aim of our paper is to analyze the effect of current Hungarian health care reform on the number of acute care hospital beds at regional level. **METHODS:** Data were derived from the nationwide administrative dataset of the National Health Insurance Fund Administration (OEP), the only health care financing agency in Hungary. We carefully review the formal legislation and informal background papers related to this issue. The number of hospital beds were evaluated before and after 1st of April 2007. **RESULTS:** The new act on developing of the Hungarian health care system cut the acute care hospital beds by 17,000 (28%) from 60,000 to 43,000 (from 59.2 to 43.7 beds per 10,000 inhabitants). The number of acut care hospital beds per 10000 inhabitants was the following before the reforms: Central-Hungary: 67.2; Southern-Transdanubia: 60.5; Northern-Greatplane: 59.4; Southern-Greatplane: 58.3; Northern-Hungary: 55.9; Western-Transdanubia: 53.3; Central-Transdanubia: 47.3. The number of acut care hospital beds per 10000 inhabitants slightly changed after the reforms: Central-Hungary: 48.3; Northern-Greatplane: 44.7; Southern-Transdanubia: 44.0; Northern-Hungary: 42.8; Southern-Greatplane: 42.6; Western-Transdanubia: 38.8; Central-Transdanubia: 37.2. We did not find significant changes among regions. **CONCLUSIONS:** Although the new legislation reduced the number of acute care hospital beds significantly in Hungary, there were no significant changes in the regional distribution.